Abstract

Title: The Effect of Exercise Intervention on Physical Fitness and Quality of Life in Patients after Bariatric Surgery

Objectives: The aim of this thesis is to evaluate the effect of a three-month physical intervention on the physical fitness and quality of life in patients after bariatric surgery. Compare the measured values from six-minute walk test (6MWT) and the questionnaire survey of quality of life between the group undergoing exercise program and the group of non-exercise patients.

Methods: The diploma thesis was constructed as a quasi-experiment. A six-minute walk test, a visual analogue pain scale, a Borg scale and a standardized IWQOL-Lite questionnaire were used to asses physical fitness and quality of life. The study involved 28 patients (8 undergoing an exercise program, 20 non-excercisers). The groups were measured before the planned bariatric surgery and about 3-4 months after the surgery. For the analysis of final values, the Microsoft Excel and its add-in Realstatistics was used.

Results: In patients undergoing the exercise program, the VAS on average decreased of 2,04 cm, 6MWT improved on average of 42,75 m, and quality of life of 34 points. In non-exercise patients there was an average decrease in VAS of 0,08 cm, an increase in 6MWT of 41,45 m and an increase in quality of life of 18 points. According to the obtained values, there was a greater improvement in exercise patients than in non-exercise patients, but the difference was not statistically significant.

Keywords: bariatric surgery, obesity, quality of life, physical fitness, 6MWT, IWQOL-Lite